UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/615,163	07/13/2000	Thomas G. Bever	11927 P01	4750

42489	7590	06/28/2005

ERIC A. GIFFORD
11770 E. CALLE DEL VALLE
TUCSON, AZ 85749

EXAMINER
LUDWIG, MATTHEW J

ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 July 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36 and 40-45* is/are rejected.

7)☒ Claim(s) *37, 38, 39* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

1.   This action is responsive to the amendment filed 7/8/04.

2.   Claims 1-33 are pending in the case. Claims 1, 29, 32, and 33 are independent claims.

Applicant added claims 34-45.

3.   Claims 1-33 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Walker.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   **Claims 12, 15 and 32 are rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

In reference to dependent claim 12 and 15, the term *"wherein said text input is formatted according to said determined phrases to **maintain the aesthetic quality of the text input**"* is a relative term which renders the claim indefinite. The term "maintain the aesthetic quality of the text input" is not defined by the claim. Furthermore, the specification does not provide a standard for ascertaining the requisite degree and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Appropriate correction required.

In reference to dependent claim 32, the term "to improve publishing economies of scale while minimizing degradation to text readability" is a relative term which renders the claim indefinite. The term "publishing economies of scale while minimizing degradation to text readability" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite

degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the

invention. Appropriate correction required.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   **Claims 1-29, 33-36, 40, and 41 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Walker, USPN 6,279,017 filed (2/2/98).**

In reference to independent claim 1, Walker teaches:

- Extracting attributes such as parts of speech from an input sentence (compare to

"providing text input"). See column 2, lines 60-67.

- Words are looked up in dictionaries, glossaries, and tables to determine word attributes

(compare to *"providing a library of function words and punctuation definitions"*). See column

11, lines 60-64. Furthermore, the reference teaches primary folding point locations can be stored

as an attribute in a node in a linked list of nodes forming the enriched sentence. See column 13,

lines 50-54.

- The text is parsed to identify paragraphs, sentences, words, and punctuation (compare to

"examining a first plurality of words of said text input"). See column 11, lines 27-32.

- Folding points are determined using primary folding rules, which determine primary

folding point locations based on punctuation marks (compare to *"determining using said*

function words and punctuation definitions, whether said first plurality of words includes a

phrase"). See column 13, lines 40-67. The reference further discloses secondary folding points

before the prepositions "in" and "of". Secondary folding points divide Super-phrases into "Mini-

phrases". See column 14, lines 20-30. The defined term phrase (as currently claimed) and the

phase techniques taught by Walk provide a reasonable suggestion of the utilization of function

words and punctuation definitions for determining said phrase within text.

- Produce a text presentation product in time and in space that is more meaningful and

enhances the reader's ability to comprehend the literal meaning of the text to a greater degree

than existing formats on computers (compare to *"formatting said text input according to said*

determined phrases whereby the text input is formatted to enhance readability"). See column 4,

lines 28-32.

The reference does not explicitly disclose marking the phrase; however, it would have

been obvious to one of ordinary skill in the art, having the teachings of Walker before him at the

time the invention was made, to modify the folding point (*Phrase*) storing methods of Walker

and marked the phrase found within the text, because a database provides the essential nodes in

the formation of enriched sentences and would have given the user the added benefit of

improved reading comprehension when one sentence appears at a time and when the transition

from one paragraph to another is signaled within a database and allows for a pause for the

appearance of these elements of text.

In reference to dependent claim 2-10, Walker teaches:

Extracting text specific attributes from machine-readable text and creating a visual

product for enhancing the reading experience. See column 2, lines 58-65. The reference does not

explicitly disclose what type of device is providing the machine readable text; however, there are

many such devices well known in the art that are capable of supplying a processor with machine

readable text. Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to have received machine readable text from a speech recognition

device, computer keyboard, touch pad, on-screen touch pad, handwriting recognition device,

prosthetic device, network input, or a text-generating computer application. For the following

reasons, the devices, which were well known in the art for providing machine-readable text

based on the user's preferred input method would have provided proficient machine-readable

text based input devices and given the user a variety of input means within the claimed

invention.

In reference to dependent claim 12, 13, Walker teaches:

Sentences are segmented according to reader-approved rules. Each preposition folds a

phrase in a predictable way, resulting in two text segments, each lying on a new line. See column

3, lines 58-61. The reference further discloses displaying text on opposed pages such that reading

of text across the opposed pages can occur without waiting for pagination. See column 4, lines

43-50. The reference utilizes rules within the text based display method and provides a

reasonable interpretation of templates within a defined library specified by the user and their

preferences. The rule-based system as taught by Walker describes a trial and error process and

suggests a similar idea as that of a neural network.

In reference to dependent claim 15, Walker teaches:

The visual attributes can include text segmentation, horizontal displacement of one line relative to another, text and background color, text brightness, and animation. See column 3, lines 27-31.

In reference to dependent claim 16-18, Walker teaches:

The visual attributes can include text segmentation, horizontal displacement of one line relative to another, text and background color, text brightness, and animation. See column 3, lines 27-31.

In reference to dependent claim 20, Walker teaches:

Sentences are segmented according to reader-approved rules. Each preposition folds a phrase in a predictable way, resulting in two text segments, each lying on a new line. See column 3, lines 58-61. The reference further discloses displaying text on opposed pages such that reading of text across the opposed pages can occur without waiting for pagination. See column 4, lines 43-50. The reference utilizes rules within the text based display method and provides a reasonable interpretation of templates within a defined library specified by the user and their preferences. The rule-based system as taught by Walker describes a trial and error process and suggests a similar idea as that of a Clauseau engine.

In reference to dependent claim 21-28, Walker teaches:

The enhanced text being viewed by readers of an electronic book. See column 16, lines 20-35. The reference further discloses enhanced text stored in standard word processing format such as Microsoft Word or Corel Word Perfect. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the text enhancing techniques

of Walker and provided the enhanced text for presentation to user devices such as a printer,

speech synthesizer, video broadcast as closed-caption subtitles, a web page, magazine, or direct

marketing literature, because they all utilize the Microsoft word processing format. The

utilization of the standard word processing format taught by Walker would have provided the

user enhanced presentation devices for enhanced text.

In reference to claim 29, the claim reflects the system comprising instructions used for

performing the methods as claimed in claims 1, respectfully, and in further view of the

following, is rejected along the same rationale.

In reference to claims 32 and 33, the claims reflect similar limitations used for performing the

methods as claimed in claim 1, respectively, and in further view of the following, is rejected

along the same rationale.

In reference to dependent claim 34, Walker teaches:

Produce a text presentation product in time and in space that is more meaningful and

enhances the reader's ability to comprehend the literal meaning of the text to a greater degree

than existing formats on computers. See column 4, lines 28-32.

In reference to dependent claim 35, Walker teaches:

Sentences are segmented according to reader-approved rules. Each preposition folds a

phrase in a predictable way, resulting in two text segments, each lying on a new line. See column

3, lines 58-61. The reference further discloses displaying text on opposed pages such that reading

of text across the opposed pages can occur without waiting for pagination. See column 4, lines

43-50. The reference utilizes rules within the text based display method and provides a

reasonable interpretation of templates within a defined library specified by the user and their

preferences. The rule-based system as taught by Walker describes a trial and error process and suggests a similar idea as that of a neural network.

In reference to dependent claim 36, Walker teaches:

Produce a text presentation product in time and in space that is more meaningful and enhances the reader's ability to comprehend the literal meaning of the text to a greater degree than existing formats on computers. See column 4, lines 28-32.

In reference to dependent claim 40, Walker teaches:

The reference does not explicitly disclose marking the phrase; however, it would have been obvious to one of ordinary skill in the art, having the teachings of Walker before him at the time the invention was made, to modify the folding point (*Phrase*) storing methods of Walker and marked the phrase found within the text, because a database provides the essential nodes in the formation of enriched sentences and would have given the user the added benefit of improved reading comprehension when one sentence appears at a time and when the transition from one paragraph to another is signaled within a database and allows for a pause for the appearance of these elements of text.

In reference to dependent claim 41, Walker teaches:

Sentences are segmented according to reader-approved rules. Each preposition folds a phrase in a predictable way, resulting in two text segments, each lying on a new line. See column 3, lines 58-61. The reference further discloses displaying text on opposed pages such that reading of text across the opposed pages can occur without waiting for pagination. See column 4, lines 43-50. The reference utilizes rules within the text based display method and provides a reasonable interpretation of templates within a defined library specified by the user and their

preferences. The rule-based system as taught by Walker describes a trial and error process and suggests a similar idea as that of a neural network.

In reference to claims 11, 14, 19, and 20, the limitations reflect similar instructions used for performing the methods as claimed in independent claim 1, and in further view of the following, is rejected along the same rationale.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   **Claims 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker USPN 6,279,017 filed (2/2/98) in view of Truelson, USPN 6,223,191 filed (2/12/1998).**

In reference to independent claim 42, Walker teaches:

- Extracting attributes such as parts of speech from an input sentence (compare to *"providing text input"*). See column 2, lines 60-67.

- Words are looked up in dictionaries, glossaries, and tables to determine word attributes (compare to *"providing a library of function words and punctuation definitions"*). See column 11, lines 60-64. Furthermore, the reference teaches primary folding point locations can be stored as an attribute in a node in a linked list of nodes forming the enriched sentence. See column 13, lines 50-54.

- The text is parsed to identify paragraphs, sentences, words, and punctuation (compare to *"examining a first plurality of words of said text input"*). See column 11, lines 27-32.

- Folding points are determined using primary folding rules, which determine primary folding point locations based on punctuation marks (compare to *"determining using said function words and punctuation definitions, whether said first plurality of words includes a phrase"*). See column 13, lines 40-67. The reference further discloses secondary folding points before the prepositions "in" and "of". Secondary folding points divide Super-phrases into "Mini-phrases". See column 14, lines 20-30. The defined term phrase (as currently claimed) and the phase techniques taught by Walk provide a reasonable suggestion of the utilization of function words and punctuation definitions for determining said phrase within text.

- Produce a text presentation product in time and in space that is more meaningful and enhances the reader's ability to comprehend the literal meaning of the text to a greater degree than existing formats on computers (compare to *"formatting said text input according to said determined phrases whereby the text input is formatted to enhance readability"*). See column 4, lines 28-32.

The reference does not explicitly disclose marking the phrase; however, it would have been obvious to one of ordinary skill in the art, having the teachings of Walker before him at the time the invention was made, to modify the folding point (*Phrase*) storing methods of Walker and marked the phrase found within the text, because a database provides the essential nodes in the formation of enriched sentences and would have given the user the added benefit of improved reading comprehension when one sentence appears at a time and when the transition

from one paragraph to another is signaled within a database and allows for a pause for the appearance of these elements of text.

The reference does not explicitly teach assigning values to the spaces between words in said plurality, said assigned value being the likelihood that the word is the beginning or end of a phrase. However, Truelson provides formatted text both easier to read and more aesthetically appealing because it will have few hyphenated words, letterspaced words, or related undesirable formatting characteristics. See column 3, lines 1-10. More specifically, the reference provides the assignment of values and the determination of a letterspacing threshold. Both directives relate to the beginning and end of phrases and therefore would have provided proficient information to a designated formatter.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Walker and Truelson before him at the time the invention was made, to modify the folding point method taught by Walker to include the value-assessing techniques of Truelson because it would have given the formatter the necessary information to fold lines more accurately and increased the readability of paragraphs.

In reference to claims 43-45, the limitations reflect similar instructions used for performing the methods as claimed in independent claim 42, and in further view of the following, is rejected along the same rationale.

Allowable Subject Matter

9.   Claims 37, 38, and 39, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10.   Applicant's arguments filed 7/8/04 have been fully considered but they are not

persuasive.

Applicant states on page 14 of the amendment that applicant's invention is directed at

improving the readability of text while maintaining the aesthetics accepted within the

mainstream print community for text. The Examiner believes this argument is subjective in

nature and fails to provide one of ordinary skill in the art with a way to define the mainstream

print community for text.

Applicant argues on page 15 of the amendment that the applicant's invention determines the

phrases for "all the text input". Walker provides the parsing techniques for text files. The

reference suggests parsing through the text document which would illustrate a proficient means

for determining the phrases for "all the text input" and "formatting said text input according to

said determined phrases. The applicant is reminded that the claim limitations are to be given their

broadest reasonable interpretation within the scope of the art. Walker discloses words that are

looked up in dictionaries, glossaries, and tables to determine word attributes. See column 11,

lines 60-64. Furthermore, the reference teaches primary folding point locations can be stored as

an attribute in a node in a linked list of nodes forming the enriched sentence. See column 13,

lines 50-54. Function words are suggested within the reference and taught through the visual

attributes including text segmentation, horizontal displacement of one line relative to another,

text and background color, text brightness, and animation.

In reference to dependent claim 12, the claim has been rejected under 35 U.S.C. 112,

second paragraph as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention. The term "wherein said text input is

formatted according to said determined phrases to maintain the aesthetic quality of the text

input" is a relative term which renders the claim indefinite. The term "maintain the aesthetic

quality of the text input" is not defined by the claim, the specification does not provide a

standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be

reasonably apprised of the scope of the invention.

Applicant argues on page 17 of the amendment that the teachings of Walker are

antithetical to maintaining the aesthetic quality of the text input and are not consistent with

adjusting the size of spaces between words differently according to the determined phrases. The

term "wherein said text input is formatted according to said determined phrases to maintain the

aesthetic quality of the text input" is a relative term which renders the claim indefinite. The term

"maintain the aesthetic quality of the text input" is not defined by the claim, the specification

does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the

art would not be reasonably apprised of the scope of the invention.

On page 17 of the amendment applicant argues the selection of a particular font and font

size is not taught by the primary reference. Walker teaches that the text display attributes can

include text displacement, font height, font thickness, inter character spacing, inter-word spacing,

and interline spacing. The reference provides a suggestion of a font selection as disclosed within

the claim language.

In reference to independent claim 29, the applicant argues that Walker does not assign every space as a break point, only those that meet the primary or secondary folding criteria are assigned. Furthermore, the applicant states that because Walker is only with separating phrases onto different lines for display there is no reason to assign breakpoints to all spaces. The applicant seems to be arguing language that is not found within the limitations of the claim. More specifically, the claim states assigning values to the spaces between words in said plurality. The claim fails to state assigning values to every space between each word as argued within the applicant's amendment.

In reference to independent claim 32 the claim recites the term "to improve publishing economies of scale while minimizing degradation to text readability" which is a relative term that renders the claim indefinite. The term "publishing economies of scale while minimizing degradation to text readability" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Conclusion

11.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after
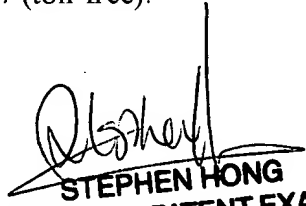
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew J. Ludwig whose telephone number is 571-272-4127.

The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML
June 21, 2005

STEPHEN HONG
SUPERVISORY PATENT EXAMINER